CHAPTER

2

Unsettled minds in uncertain times

Mental distress—an obstacle to human development

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Unsettled minds in uncertain times: Mental distress—an obstacle to human development

Unsettled lives mean unsettled minds.

What does that have to do with human development?

This chapter makes the case that mental distress weighs on human development in many ways, ultimately limiting people's freedom to live the lives they have reason to value. The effects are especially damaging to children and can perpetuate inequality in intergenerational cycles of mental distress and socioeconomic hardship. Breaking these cycles requires action from people and policymakers on three fronts: preventing distress, mitigating crises and building psychological resilience.

The preceding chapter documented the novel and unprecedented uncertainties affecting people's lives. This chapter dives into how uncertainty can cause mental distress,[1] with implications for the way people feel, think, act and interact with each other throughout their lives, restraining their freedom to achieve and to live lives they have reason to value.[2] It shows how mental distress can constrain human development and reinforce and perpetuate inequalities. It also emphasizes early childhood—as crucial for developing the brain and body but subject to the devastating consequences of toxic stress.

Mental wellbeing shapes the way people think, act and interact.[3] Individual emotion,[4] perception, cognition and motivation[5] are set in a social context of circumstances, relationships and culture.[6] Emotions, such as anger, can drive people to interpersonal violence or to violent conflict, but they can also trigger actions against injustices (see chapter 3).[7] And emotions can help in dealing with an unpredictable world (with some arguing that emotions reflect evolutionary adaptations).[8] Healthy regulation of emotions and overall mental wellbeing are crucial for peaceful and cohesive societies—and thus for human development.

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Mental distress can hinder people from developing their full potential.[9] For instance, even when free high-quality education is universally available, a student suffering from anxiety and insomnia has the choice to go to school but may not be able to concentrate because of mental distress and will thus not be able to learn as easily as her peers. These individual limitations in one aspect of human development can be carried over to other dimensions and different stages of the lifecycle, as when the same student later seeks employment, and can even act intergenerationally through distress during pregnancy and beyond.

A crucial task for people and policymakers is thus to prevent and mitigate mental distress. Since not all adversity can be prevented or mitigated, this chapter and the policy options presented in chapter 6 emphasize the importance of psychological resilience that enables people to thrive despite adversity and that is intrinsically linked to agency, a critical component of human development (see chapter 3).[10]

How mental distress constrains human development

In the absence of psychological resilience, mental distress can result in mental disorders. These are associated with poor education achievements,[11] low productivity at work,[12] poverty,[13] premature and excess mortality[14] and poor overall health. Many people suffer from mental health–related problems, commonly measured by the number of diagnosed mental disorders (spotlight 2.1).

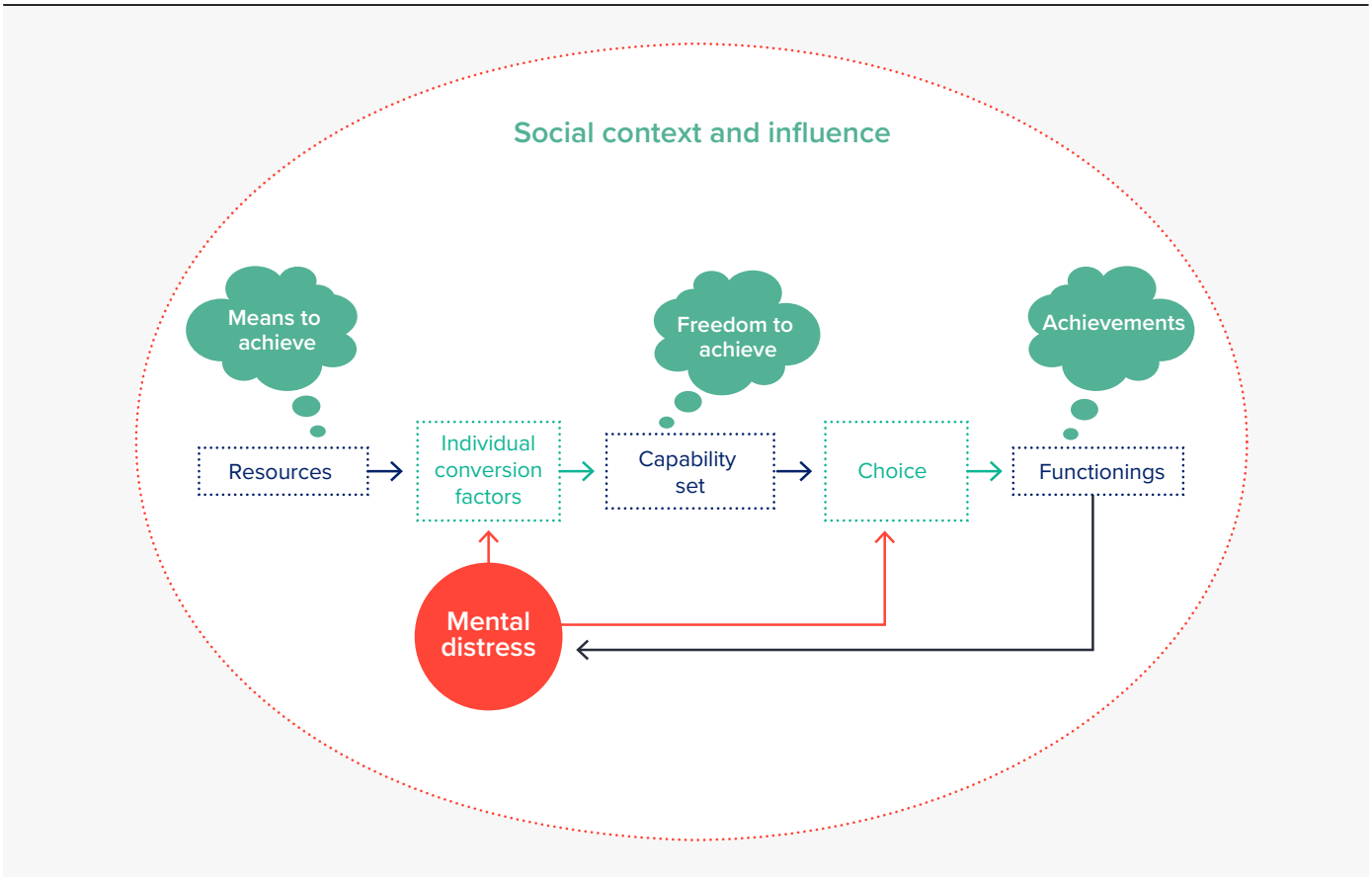
To understand the links among mental distress, mental wellbeing and human development, the capabilities approach—focusing on the capabilities that enable people to expand their freedoms to do and be what they value and have reason to value—can be helpful. Capabilities are a combination of things a person is able to do or be—the various functionings he or she can achieve.[15] Each person has his or her conversion function, with individual conversion factors that determine the ability to turn resources into capabilities (figure 2.1).

While mental wellbeing can influence choices and behaviour at multiple stages and can be a functioning itself, mental distress shapes individual conversion factors, affecting each person's ability to convert goods and services into capabilities. The complete set of achieved functionings also affects the amount and intensity of mental distress a person is exposed to. For example, a person with high income can afford to live in a safe neighbourhood, but a person with low income may not. So, the low-income person will be exposed to more mental distress caused by neighbourhood insecurity, which in turn will affect her conversion factors.

In childhood

The impact of mental distress on conversion factors, and thus capability sets, shapes not only children's individual lives but also human development prospects in adult life, with implications for society. Exposure to frequent or long-term toxic stress or adversity,

Figure 2.1 Mental distress constrains freedom to achieve, choices and achievements



Source: Human Development Report Office based on Lengfelder (2021) and Robeyns (2017).

combined with weak support systems, impairs the development of neural circuits responsible for emotional self-regulation, cognition and behaviour.[16] In some cases this creates long-term physical and mental health problems, including damage to the developing brain.[17] A child's developing brain sets the foundation for future learning, behaviour and health.[18] Damages are difficult, though not impossible, to remedy later in life.

When stressors such as domestic violence, child maltreatment or extreme poverty activate the stress response system frequently or over an extended period, physiological responses that usually deal with short-term stress remain activated or become permanently calibrated to activate more easily and do not turn off as readily as they should. They then can overwhelm the biological system (called allostatic overload) and impair the development of neural connections (figure 2.2).[19] Abundant empirical evidence shows that this process, apart from causing (chronic) mental disorders, can increase the possibility of obesity, cancer, diabetes, cardiovascular disease, substance abuse, autoimmune disease, impaired cognition and interpersonal and self-directed violence.[20] And even without mental disorders, emotions and cognition can be impaired with a similar effect on some parts of the body, since processes in the brain are linked with those in the microbiome and the gut.[21]

These interactions shape the possibilities for learning, earning good income and leading a long and healthy life. They can thus constrain the conversion function and the ability to turn resources into capabilities and may shape choices with potentially long-lasting effects throughout the lifecycle. Basic trust established during infancy[22] and supportive relationships with caregivers and other adults in the community can buffer some of these effects[23] and build resilience. Role models are especially important, as is perceived self-efficacy—both shape

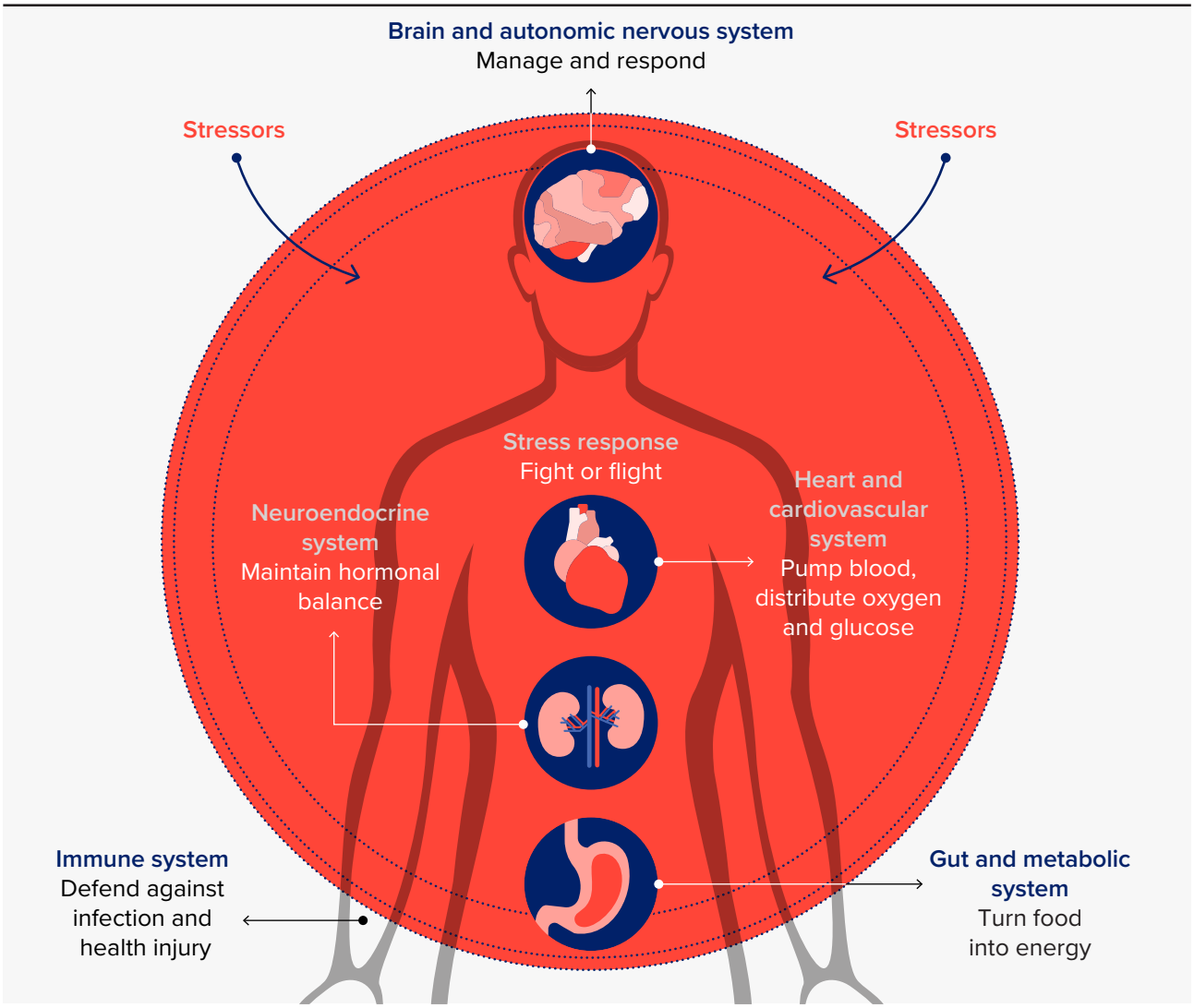
children's aspirations and beliefs in how much they can achieve.[24] But when caregivers and other adults in the social network themselves face adversity or permanent stressors, these support structures may be weak or even counterproductive. Severe maternal distress also seems to alter DNA.[25] Mothers' exposure to adversity can increase defensive behaviour among offspring, which might be biologically useful in malign environments but can also lead to pathologies, even among children raised in safe environments after the adversity subsides.[26]

Such children are not necessarily doomed for life. Multiple biological, psychological, social and ecological systems interact to build resilience, which helps them absorb some distress throughout the lifecycle. The interplay of individual, social and community factors can produce secure attachments, cognitive reappraisals, family cohesion, social structures and support networks.[27] Exposure to nature can also make a difference. People, particularly children,[28] who are frequently exposed to nature or spend much time outdoors tend to be more resilient to adversity and mental distress than those who do not.[29]

In adulthood

For adults severe mental distress can impair capabilities in a similar way—but at a time when the development of the brain and other organs is already

Figure 2.2 Connecting mental and physical health



Source: National Scientific Council on the Developing Child 2020.

advanced or concluded. Still, adults who suffer from mental distress over an extended period have impaired conversion factors, resulting in constrained capability sets (or freedoms to achieve). That includes the ability to continue learning, to work and earn income, to lead a long and healthy life, to have attachments to things and people, to form perceptions of good and bad, to plan one's own life, to affiliate with others, to care about other species and to enjoy recreational activities[30]—even if external conditions are favourable. Some external conditions, such as access to information or health services, can also help build psychological resilience among adults, which can absorb some of the stress and provide room to deal with future adversity.[31] Mental health at older ages partly reflects individual adversities and resilience, but some other mental disorders common among older people have other causes.[32]

> "In uncertain times mental distress among individuals can have costs for societies, as it restrains people from reaching their full potential throughout the lifecycle

In uncertain times mental distress among individuals can have costs for societies, as it restrains people from reaching their full potential throughout the lifecycle—thus constraining human development. And since different people are exposed to different levels of mental distress, it can increase inequalities and even perpetuate them when distress is transferred from caregivers to children.

Unsettled minds amid multidimensional uncertainties

New and persistent drivers of insecurity unsettle people's lives in the context of uncertainty (see chapter 1). They include multiple forms of violence, which comprise violent conflict between groups and interpersonal violence, ranging from domestic to neighbourhood violence. Other stressors may not always threaten physical wellbeing but can still cause serious mental distress: discrimination, exclusion, economic insecurity and uncertainties associated either with the more frequent and extreme hazards of the Anthropocene or with transitions and rapid technological change, as with digitalization.

The Anthropocene context is a driver of uncertainty without precedent in human history. It is manifest not only in climate change but also in biodiversity loss and the depletion and contamination of natural resources.[33] Efforts to ease planetary pressures are also a source of uncertainty, driving real or perceived threats associated with the transitions in economic and social systems in a context of rapid digital transformation. Precarious jobs, digital inequality, cyberattacks, data fraud and concentrated digital power can all cause serious mental distress. This section discusses evidence showing how these manifestations of uncertainty affect mental wellbeing and can also drive inequalities in human development.

Minds pressured in the Anthropocene

As discussed in chapter 1, dangerous planetary change in the Anthropocene is reflected in climate change, biodiversity loss and the more frequent emergence or re-emergence of zoonotic diseases, with Covid-19 likely the latest. The effects on mental wellbeing run through several channels:

- *Traumatizing events.* The increase in extreme weather events often goes hand in hand with losses or damages of housing or crops as well as injuries and even deaths of loved ones. These experiences can cause tremendous human suffering, often leading to post-traumatic stress (spotlight 2.2), anxiety, depression, distress, grief, survivor guilt, substance abuse and even suicide.[34]
- *Physical illness.* Exposure to extreme heat can cause heat exhaustion, leading to mental distress.[35] And sharp spikes in temperature cause irritability, more aggressive thoughts and feelings, and even violent behaviour.[36] Following distress and grief that Covid-19 has caused around the world (see below), the constant possibility of another deadly variant or a new zoonotic disease also pressures minds in the Anthropocene.
- *General climate- or eco-anxiety and solastalgia.* Climate change can have two different effects on people, depending partly on psychological resilience. It increases general anxiety and worries about the future,[37] which encourages some people to become agents for climate action but may leave others feeling anxious and incapable of changing

anything.[38] Young people claim that governments around the world have dismissed or neglected their requests for urgent action.[39] Indigenous peoples from around the world, among the most affected by climate change, have suffered mental distress over seasonal changes and acute weather events.[40]

- *Food insecurity.* With increasing extreme weather events disrupting food production and access, food insecurity is on the rise again after decades of decline.[41] In addition to being a threat to physical health, it is also a serious mental stressor.[42] It has been associated with psychological distress in both low and high human development countries.[43] In several African countries women and older people are especially affected. The most effective interventions target livelihoods as opposed to income only.[44]
- *Biodiversity loss.* Biodiversity loss can drive mental distress, especially among indigenous and marginalized communities, leading to longer-term adverse psychological and behavioural impacts, such as increased family stress, amplification of previous trauma, greater likelihood of substance abuse and higher prevalence of suicide ideation.[45] While causal mechanisms are yet to be fully understood, some reasons can include that biodiversity loss causes disruptions to physical health through altered food systems or leads to a different sense of place that can undermine cultural practices and knowledge systems. Moreover, it can impair self-determination by reducing the sufficiency of locally available resources, and it can result in a loss of social capital as community members rely increasingly on outside sources of aid and income rather than on one another.[46]

The adverse consequences of climate change are already affecting people who more directly depend on agriculture and natural resources for their livelihoods, including those in communities in rural, coastal, mountainous or forest areas, many of them indigenous.[47] Since many of these people live in low-income countries and are already disadvantaged, mental distress and its effects on the conversion factors can further increase inequalities in freedoms to achieve.

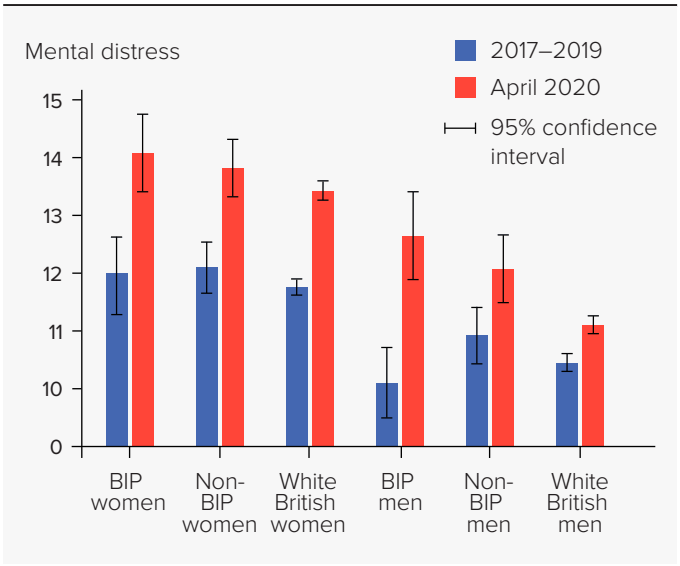
The depletion of natural resources and land-use changes through deforestation and for agricultural use are putting pressures on biodiversity and threatening the integrity of ecosystem functions, with several unknown threats potentially to come, including more frequent zoonotic diseases.[48] As discussed in chapter 1, the Covid-19 pandemic may be the latest but surely will not be the last, with implications that include multiple lockdowns all over the world that may cause mental distress in the future as they did during Covid-19.[49]

"Biodiversity loss can drive mental distress, especially among indigenous and marginalized communities, leading to longer-term adverse psychological and behavioural impacts

During the first year of the Covid-19 pandemic, the global prevalence of depression and anxiety increased by more than 25 percent.[50] The increase was greater among women than men, most likely because women were more affected by the socioeconomic consequences of lockdowns.[51] In a global survey 77 percent of respondents reported moderate to severe stress and poor sleep, and 59 percent suffered from anxiety and 35 percent from depression (only 18 percent had previously been diagnosed with a mental disorder).[52] Young people suffered—most likely because of missed opportunities during multiple lockdowns.[53] People with low incomes, struggling to afford basic needs such as rent and food, suffered disproportionally in several countries.[54]

Women, who took on most of the additional domestic and care work that emerged during school closures and lockdowns,[55] faced more mental distress than before the Covid-19 pandemic.[56] A cross-country survey found that 27 percent of women struggled with mental distress, compared with 10 percent of men. Women cited their escalating unpaid care burden as a critical stressor, alongside concerns about food, healthcare and livelihoods. Given the links among employment, income, food security and mental health, it is noteworthy that 55 percent of women reported income loss as the top impact of the pandemic (compared with 34 percent of men) and that 41 percent of women (versus 30 percent of men) reported not having enough food.[57] Ethnic minorities of both sexes were severely affected in the United Kingdom, with the largest increase in mental distress among men with a background from Bangladesh, India or Pakistan (figure 2.3).[58]

Figure 2.3 In the United Kingdom mental distress is most prevalent among female minority groups, but mental distress among male minority groups increased most during the Covid-19 pandemic



BIP refers to people with a background from Bangladesh, India or Pakistan.
Note: Changes in mental distress were measured by the 12-item General Health Questionnaire. Higher scores (on a scale of 0 to 36) mean more mental distress.
Source: Proto and Quintana-Domeque 2021.

More than two years into the Covid-19 pandemic, worries about the virus have somewhat dissipated in parts of the world. But anxiety about new variants—and the possibility of mandatory quarantines, lockdowns and cancellations—remains around the globe. The abrupt halt and related uncertainty that the pandemic inflicted on many people's lives will likely linger for some time.

Economic insecurity drives mental distress

Economic insecurity—expressed in periods of low income, unemployment, poor working conditions, poverty, housing instability and financial shocks—can cause mental distress. Even the perception that such outcomes could materialize may give people reason to worry, particularly in contexts of economic precariousness or dislocations. And even when these dislocations are transitory or small relative to the scale of an economy, they can loom as scary threats in particular regions or sectors.[59]

The causal relation also works in reverse: people with impaired mental (and physical) health have fewer employment opportunities and can face income penalties for their conditions.[60] Especially in economic contexts where brain-based skills such as emotional intelligence, creativity, cognitive flexibility, self-control or system thinking matter more than manual skills,[61] mental wellbeing is increasingly important to thrive in the professional world, while the lack of it can further exacerbate disadvantages. In other contexts where people work in agriculture, they are being increasingly exposed to the stresses of extreme weather events that jeopardize their source of income and food security—and with it both physical and mental wellbeing.

The association of economic insecurity with mental distress starts very early in life, indeed in the mother's womb. Some foetuses are exposed to more stress and worry related to poverty, malnutrition, violence or environmental irritants associated with poverty (such as pollution or extreme temperatures) than others.[62] The intergenerational effect continues during childhood when parents' mental distress impairs children's wellbeing, with effects into adulthood.[63] If the situation continues throughout childhood, this can lead to long-term adaptive behaviour and pathologies that are hard to break later in life.[64] For instance, children who grow up with food insecurity often continue binge eating even after hardship is overcome.[65] These effects can be buffered by social institutions or informal aid in the community, such as cash transfers to mothers, which have been shown to improve infant brain activity and subsequent cognitive skills and mental wellbeing.[66]

Even less severe conditions of low socioeconomic status and related social structures can affect children's brain and body development, cognitive functioning and mental and physical health. For example, children in families who live in crowded, chaotic or noisy conditions or unsafe neighbourhoods and who lack organization and daily routines are usually exposed to higher mental distress.[67] And the belief in how much one is capable of achieving—which is usually lower in low socioeconomic status families—can diminish children's aspirations and achievements.[68] These factors can accumulate,[69] which is in line with models of cumulative advantage and disadvantage that look at socioeconomic disparities in general and health disparities in particular.[70] The 2019 Human Development Report analysed in detail how this mechanism acts in intergenerational

ways, perpetuating multidimensional inequalities in human development.[71]

During adulthood perceived and actual economic insecurity as well as anticipated future downside risks are detrimental for mental wellbeing at all incomes, especially for men.[72] Income shocks have been shown to increase suicides in some contexts, an effect that can be mitigated by cash transfers.[73] One of the most serious economic threats to mental wellbeing stems from repeated financial shocks, such as income loss, especially for poor people and for men.[74] Shocks already experienced, such as unemployment, worsen expectations for the future and reduce life satisfaction.[75] Continued employment is not only important to avoid financial stress; it also has positive psychosocial effects, such as stimulating the feeling of belonging to a community and contributing productively to society.[76]

Persistent low incomes are also associated with poorer mental health and wellbeing, especially when generating a sense of scarcity or insufficiency compared with peers in the community.[77] People at the lower end of the income spectrum suffer from mental distress 1.5–3 times as often as people at the higher end[78] and are more likely to experience violent crime and traumatic events,[79] which can make some people want to leave their place of origin (box 2.1). However, even people with higher incomes can experience resentment and frustrations due to financial concerns, especially when aspirations are very high and the social environment is such that people perceive high inequality compared with their peers.[80]

Status incongruence is an important concept here. For example, having a high level of education in a manual occupation or low-skilled nonmanual occupation has been shown to cause emotional discomfort, such as feelings of shame and anxiety,[81] pessimistic outlooks and overall poor mental wellbeing. With rising education levels and labour markets that are unable to absorb all qualified labour, cases of status incongruence have increased and are expected to become even more prevalent.[82] Positive expectations and belief in the ability to achieve one's goals can partially compensate for negative effects on mental wellbeing.[83] Finally, at older ages a higher debt burden

Box 2.1 Multidimensional uncertainties may make some people subject to human trafficking—another source of severe mental distress

Multidimensional uncertainties make some people want to look for a better future elsewhere. But bureaucratic obstacles often stand in the way of free migration, so that some people fall victim to human trafficking. Networks of organized crime consisting of traffickers typically make false promises of education or job opportunities using fraudulent employment agencies to trick victims before applying violence and coercion.[1] The experience of being trafficked is often traumatic, with restriction of movement and violence, and fear of being discovered, detained and deported.[2] An Ethiopia-based study found that among human trafficked returnees the prevalence of depression was about 58 percent, that of anxiety 52 percent and that of post-traumatic stress disorder (PTSD) 35 percent. Restricted movement was associated with anxiety, depression and PTSD, whereas experiencing violence during trafficking was linked to anxiety and PTSD. Detention contributed to all three disorders.[3]

A study of trafficked women and girls from Monterrey and Reynosa (Mexico) found that all of the study's participants were experiencing feelings of tension, stress, anxiety, worry and anger and that most of them were crying more than usual (86 percent), lacking appetite (86 percent) and having suicidal thoughts (80 percent).[4] Among human trafficking survivors in the Greater Mekong subregion, men, women and children who had experienced violence during trafficking faced a higher prevalence of anxiety, depression and PTSD than those who did not.[5] In addition to experiencing mental distress, many victims of human trafficking do not find what they had expected at their destination but face new challenges, such as adaptation to a new environment and sometimes even dependence and human rights violations from their traffickers.

From a human development perspective human trafficking takes away people's agency and freedoms as well as the possibility for them to make their own choices and determine their futures. Managing safe migration is crucial to tackling human trafficking and should be taken up through cooperation and partnership among countries.

Notes
1. UNODC 2021. **2.** Acharya and Sanchez 2018; Gezie and others 2018; Iglesias-Rios and others 2018; Mumey and others 2020; Ottisova and others 2018. **3.** Gezie and others 2018. **4.** Acharya and Sanchez 2018. **5.** Iglesias-Rios and others 2018.

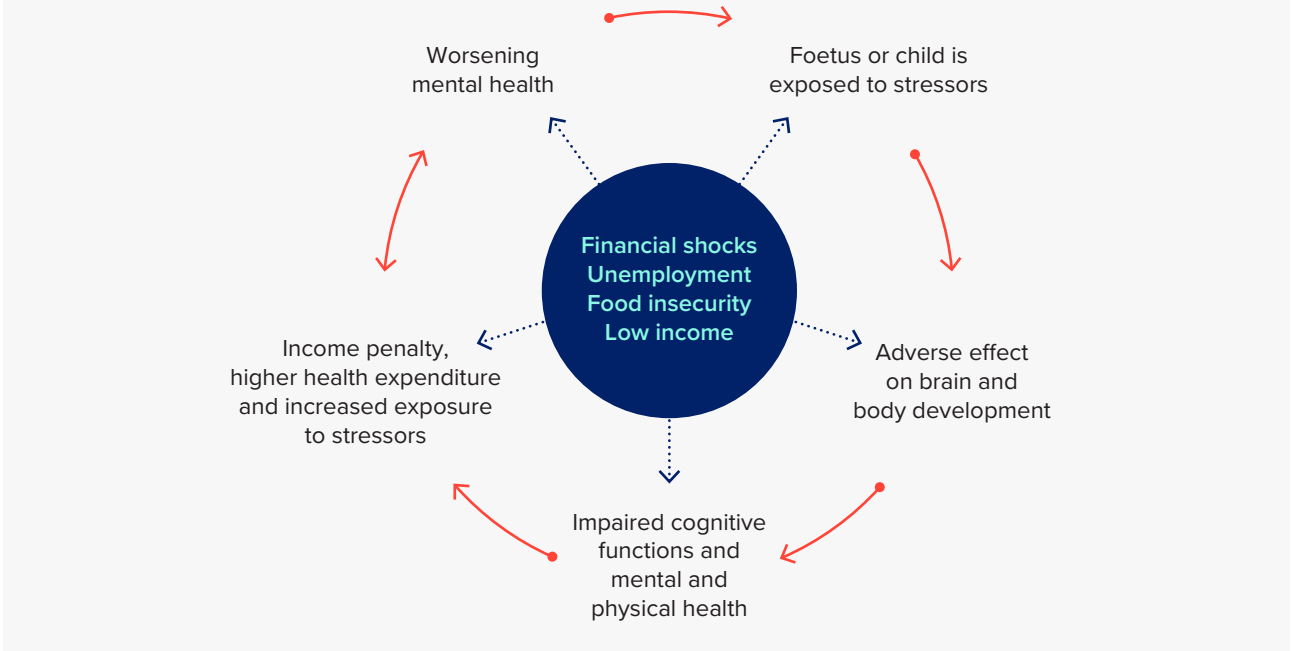
can cause social and emotional loneliness, independent of social participation, social network size, and previous states of anxiety or depression.[84] Moreover, there is a growing understanding of the long-term impacts of income downturns.[85] When an economic downturn coincides with a health shock, as with Covid-19, the implications can be magnified and perpetuated across generations.[86] The channel for much of the lasting scarring to take hold relates primarily to behavioural and psychological impacts that have implications throughout life, even after the economy bounces back.[87]

Causality also runs the other way. Mental distress lowers people's ability to work productively and distorts the way people think, with consequences for the way they search for work, interact with people and carry out their work.[88] Alleviating financial worries improves workers' productivity, making them more attentive, faster and less prone to mistakes,[89] as poverty appears to burden cognitive capacity (but see the discussion in chapter 3 suggesting that the burden may be contingent on social context).[90] It can also modify the content of cognition, adding a monetary perspective to many dimensions of life, which is difficult to suppress and may shape decisionmaking and social relationships.[91] Conversely, poverty alleviation can improve socialization and other noncognitive skills, such as agreeableness and conscientiousness, while diminishing hostility and aggression.[92]

Severe mental distress can undermine physical health, which can lead to an inability to carry out certain work—and increase health spending where there are gaps in health insurance or public provision of health services.[93] Furthermore, mental distress can result in job loss or income decline, not least because it affects preferences, beliefs, cognitive functioning and ultimately economic decisionmaking.[94] People with depression earn about 34 percent less than the average person, people with bipolar disorder about 38 percent less and people with schizophrenia about 74 percent less. People with these conditions also face a much higher risk of no income and disability.[95] And the lack of income can cause even more mental distress. The circular relation has been found to nearly double the negative impact of financial shocks, explaining low financial resilience in a long-term mental distress–poverty trap.[96]

The circular and intergenerational relation between economic insecurity and mental distress can perpetuate economic inequality across generations (figure 2.4).

Figure 2.4 The circular and intergenerational relation between economic insecurity and mental distress can perpetuate economic inequality across generations



Source: Human Development Report Office.

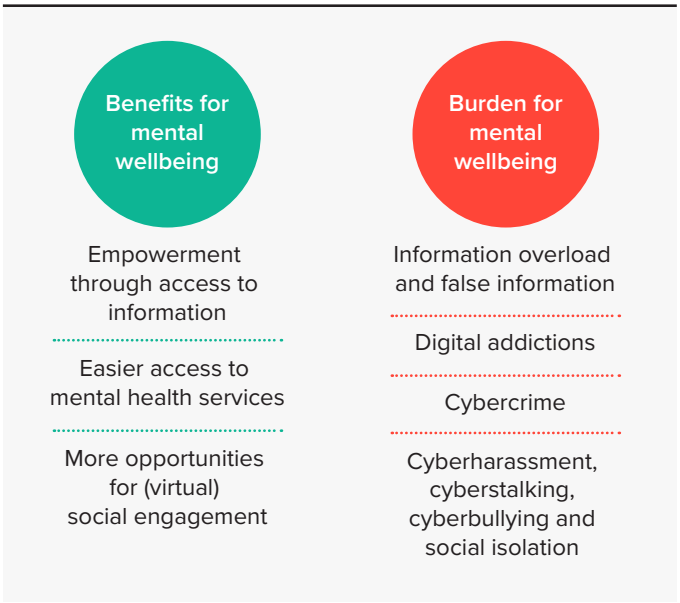
Digitalization—double-edged for mental wellbeing

Digital technologies can generally improve life, as they facilitate many processes, increase efficiency and connect people from different parts of the world. They can even accelerate the achievement of the Sustainable Development Goals (SDGs).[97] A recent study covering more than 200 countries found that mobile phone access was associated with higher gender equality through multiple channels (lower maternal mortality, better information about sexual and reproductive health services, higher empowerment to make independent decisions, with larger gains among the least developed countries and among the most disadvantaged groups).[98] In this sense digitalization can contribute to empowerment, essential for mental wellbeing.

But the benefits of these new technologies also come with challenges. Digitalization poses several social and economic threats, including, but not limited to, lower labour demand for some tasks,[99] digital inequality and exclusion,[100] cybercrime and the related theft of financial resources and personal information,[101] transfer of decisionmaking powers to machines, digital power concentration,[102] digital addictions[103] and violence,[104] and reduced personal life security.[105] One of the most serious challenges of digitalization is digital inequality.[106] Poor people and those with existing mental disorders have a higher probability of being digitally excluded, which potentially increases inequalities in other areas.[107]

Some of these challenges can cause mental distress, despite the fact that some of the benefits of digital technologies foster mental wellbeing (figure 2.5). For instance, cyberharassment and cyberstalking have been associated with anxiety, panic attacks, suicidal ideation[108] and depression.[109] Mobile devices, social networks and cloud computing services can be used to stalk people and conduct surveillance.[110] Digital platforms such as Facebook, Instagram and Twitter can be used in a similar way as well as for social comparison, negative interactions, cyberbullying, and sharing violent content and violent or discriminative language.[111] This has been associated with mental distress and suicidal behaviour, with the highest prevalence among girls.[112] Older people may feel excluded from socialization when the younger generation spends time on social media or with other technologies.

Figure 2.5 Digitalization is a double-edged sword for mental wellbeing



Source: Human Development Report Office.

Digital exclusion can be found among healthcare services. While digital healthcare services can provide substantial benefits for people with fast internet connections and digital skills—and thus have potential to widen access to health services among some remote populations (box 2.2)—people without these advantages are less likely to benefit from services.[113]

While access to information can be empowering, abundant and sometimes false information (which is easy to distribute through social media) can also be a source of anxiety. Not only can people feel anxious because of too much and sometimes contradictory information, but they may also stress about information that is not even true. During the early stages of the Covid-19 pandemic, and often continuing beyond, false information about the virus, its cures and vaccines went viral on communication platforms such as Facebook and Twitter, causing anxiety in many people.[114] The abundance of information seems to constitute a stressor (information overload), making it more likely that people share false information.[115]

Another way digitalization can cause mental distress is obsessive use of digital technologies, digital platforms and digital devices.[116] Obsessive smartphone use can result in chronic sleep

Box 2.2 Potential of telehealth for increasing access to mental healthcare

Digitalization can improve health systems and the provision of healthcare services[1] if digital technologies are readily available to the whole population. Mobile and electronic interventions allow easy access to mental health services and information on prevention, counselling and treatment.[2] Telehealth, which involves telephone or video via various web-based applications,[3] has gained global prominence over the years. By 2016 more than 50 percent of countries that responded to a World Health Organization survey reported having a national telehealth policy, about 70 percent claimed to have a teleradiology programme and approximately 25 percent said they had conducted a telehealth programme evaluation.[4] In many parts of Africa, particularly in rural areas populated mostly by young people, there is great potential for expanding telehealth services.[5] The Covid-19 pandemic massively increased telehealth programmes and platforms. In the United Kingdom the proportion of doctor's appointments over the phone or by video call increased from 13 percent in 2019 to 48 percent by mid-2020.[6] In some East Asia and Pacific countries[7] and in the United States,[8] the number of telehealth users more than doubled in the first month of the pandemic.

Since most mental health services do not require physical examinations, digital services are especially promising, allowing people from remote areas to get help online without traveling long distances. Such services can be more time and cost efficient, providing support while people wait for face-to-face interventions.[9]

Undermining these benefits are poor network infrastructure, inadequate funding to support telehealth programmes, competing health system priorities, internet access inequalities and a lack of digital skills among all or parts of the population.[10] So for digital mental health interventions to improve health outcomes without increasing inequality, countries need to increase telehealth budgets, expand internet access in deprived communities and empower people from these communities through education and training on how to use digital devices and platforms.

Notes
1. Ricciardi and others 2019. **2.** Apolinário-Hagen 2017. **3.** Aref-Adib and Hassiotis 2021. **4.** WHO 2016. **5.** Holst and others 2020. **6.** ITU 2021. **7.** Data are for Australia, China, Indonesia and Singapore. Kapur and Boulton 2021. **8.** Koonin and others 2020. **9.** Mental Health Foundation 2021. **10.** Kearns and Whitley 2019; Skinner, Biscope and Poland 2003; WHO 2016.

deprivation and undermines cognitive control and socioemotional functioning.[117] Digital technology can also promote gambling—an activity associated with mental disorders.[118] Young people in particular appear to engage in digital gambling on social platforms, smartphones and specialized websites.[119] The World Health Organization has recognized gaming disorder as a mental health issue, given its adverse health impacts and increasing prevalence.[120]

Cybercrime, such as fraud, theft, scams and other forms of online financial exploitation, can cause excessive worrying and anxiety and has been linked to depression among older adults.[121] Moreover, internet use reduces offline interaction, political participation and civic cultural engagement,[122] increasing the likelihood of social isolation.[123] By contrast, digital technology can also create social engagement opportunities that help eliminate loneliness and social isolation[124] and improve wellbeing[125]—for example, by connecting to people with similar interests or problems over long distances (self-help forums). By doing so, digital technology can also alleviate mental distress.[126]

Violence scares, unsettles and scars lives

Given the direct threat to physical integrity, most forms of violence cause mental distress, often leading to mental disorders such as post-traumatic stress disorder (PTSD), anxiety and depression, and each form of violence comes with additional challenges depending on context and setting. Interpersonal violence includes domestic and community violence, such as intimate partner violence, child or elder abuse and assaults by strangers. Collective violence occurs between larger groups, such as organized crime and armed conflicts.[127]

Interpersonal violence can increase inequalities in opportunity

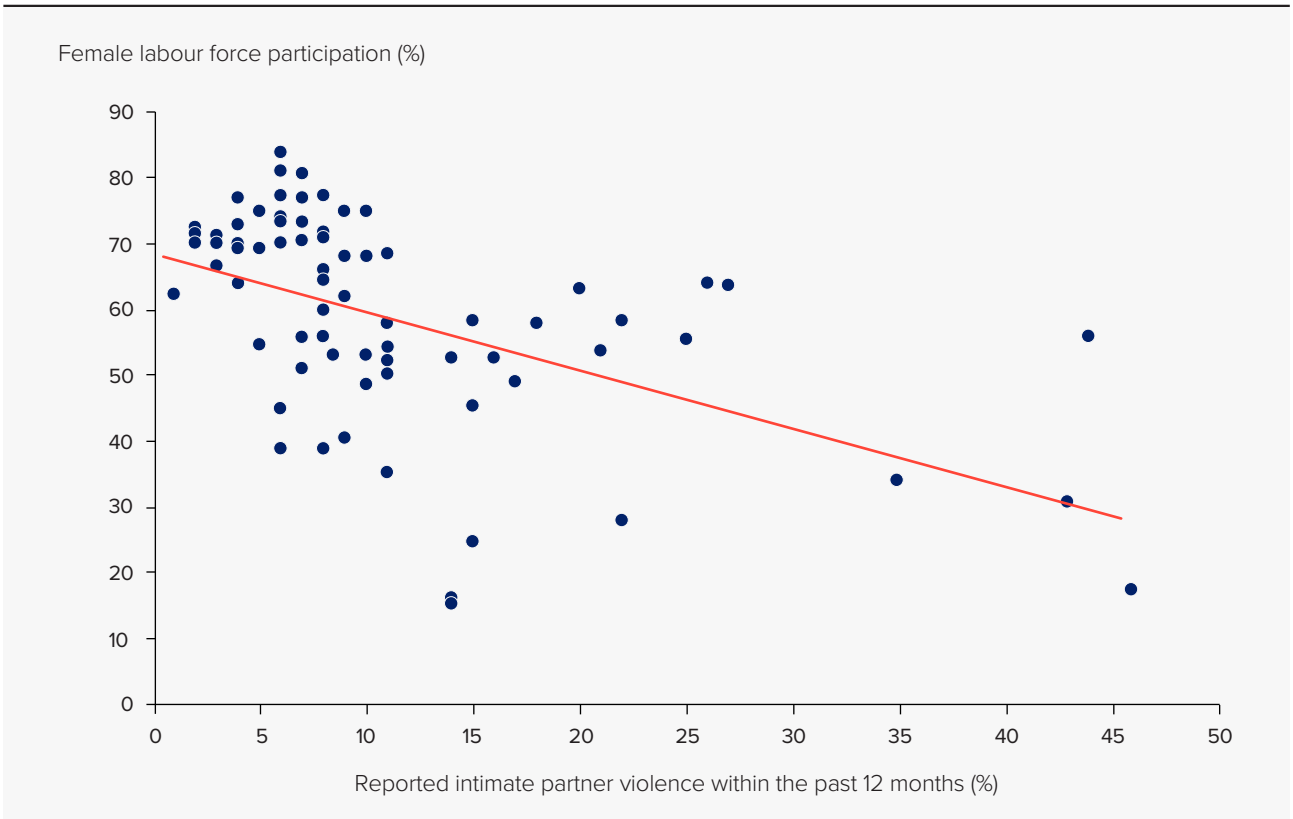
Psychologically, domestic violence is extremely toxic, as the home is a place that should provide protection and safety, constituting a location to rest and relax away from other environmental stressors. When several forms of domestic violence happen simultaneously, they can create a vicious cycle of dependence

and abuse. For instance, the perpetrator controls the household's financial resources, making the victim financially dependent,[128] while invoking fear and undermining self-worth and self-esteem through verbal abuse, constant criticism and social isolation, which can lead to a withdrawal from the labour force, housing stress and ultimately a loss of self-identity.[129] The key here is dominance over the partner through emotional, economic or psychological abuse,[130] which then substantially limits the possibilities to escape physical violence as well. This mechanism is reflected in data showing that in countries with lower female labour force participation, more women experience intimate partner violence (figure 2.6). While men can certainly also be affected, the majority of intimate partner violence survivors are women.[131]

Bisexual and gay men report worse psychological consequences following intimate partner violence than straight men.[132] This is possibly due to the combined burden of mental stressors, including discrimination, and social pressures of internalized masculinity norms suggesting that men should be more resistant to oppression and violence.[133] Due to gender stereotypes in some criminal justice systems, there also appears to be hesitance to report assaults out of fear of being misjudged as the perpetrator. In various country contexts men who had filed police reports recounted that authorities had responded to their plea for help with suspicion, ridicule or even arrest.[134]

When older people live in a household with family members, which is common in some cultural contexts, domestic violence can also be directed towards them, affecting their physical and mental health.[135] This happens more frequently among older people with physical disabilities (49 percent) and with psychological disabilities (7 percent). Many, but not all, affected older people are female (63 percent).[136]

Figure 2.6 Intimate partner violence increases with economic dependence



Note: Reported intimate partner violence within the past 12 months includes women and girls over age 15 who have experienced physical and/or sexual partner violence. Female labour force participation refers to the percentage of women ages 15–64 participating in the labour force for the most recent data year available. Only countries with data on female labour force participation for 2019 or later are included to allow for direct comparisons with the most recent United Nations Population Fund dataset on intimate partner violence. Similarly, only countries with data on female labour force participation for women ages 15–64 are included to control for potential effects of age. The statistically significant correlation coefficient is –0.53019.
Source: Human Development Report Office calculations using data from ILO (2021a) and UNFPA (2021).

The consequences of domestic violence for mental wellbeing range from milder symptoms such as elevated psychological stress to full-fledged clinical presentations of mental disorders such as PTSD, phobias, substance abuse, depression and anxiety.[137] Survivors of physical domestic violence are also prone to traumatic brain injury, with devastating consequences for their ability to function in society, including to work and socialize.[138] All of this can eventually result in a loss of agency, when individuals no longer feel able to shape and change their circumstances, lose hope altogether and become vulnerable to revictimization.[139]

> "More than half the world's children ages 2–17—around a billion—have experienced emotional, physical or sexual violence, with devastating consequences for their mental wellbeing

Even when physical attacks are not targeted towards them, children are affected through three channels:

- Witnessing attacks on one of their caregivers.
- PTSD symptoms of caregivers that undermine quality of care.
- Traumatizing parenting styles or emotional unavailability that emerge as a result of caregivers' mental distress.[140]

When children themselves fall victim to psychological, sexual or physical abuse, mental distress is most severe. More than half the world's children ages 2–17—around a billion—have experienced emotional, physical or sexual violence.[141] When stressors come from outside the home, stable relationships with caregivers typically function as buffers for children's mental wellbeing. But when caregivers become aggressors, one of the most important instincts—trust in caregivers—becomes damaged, equalling betrayal by the people the child depends on.[142] It impairs basic trust in life and can have severe long-term, and sometimes irreversible, consequences for children's psychological and physical health as well as for their overall functioning, causing what is called complex childhood or developmental trauma.[143] The conversion function of these children thus differs from those of children who grew up in a nonviolent household, unless a very favourable combination of resilient building factors comes together and absorbs part of the toxic stress the child has suffered.[144] Culturally aligned interventions are crucial here, as discussions of domestic violence are still taboo in many societies, hindering social workers from intervening and making mental health treatments available for children.

Community violence ranges from isolated acts of assault by strangers or acquaintances, such as bullying, armed robbery and sexual abuse, to workplace and institutional violence.[145] Neighbourhoods are not simply the physical locations in which we reside; they are also places with intricate socioeconomic–spatial connections (box 2.3).[146] While neighbourhood characteristics—including education and healthcare facilities, transport connectivity and crime levels as well as perceived safety and social cohesion—may affect outcomes such as health, education and income,[147] these same outcomes in turn determine which neighbourhoods are accessible to people.[148] This effect constitutes an obstacle to intra- and intergenerational mobility, as it can trap people in cycles of low income, poor health and education, and surroundings prone to amplifying these disadvantages.[149] Mental distress is an additional risk factor in this trap, given its consequences for cognition, productivity and overall functioning.[150] For children, who typically depend on their parents' housing decisions, the effect is equally strong, if not more severe, since they are much more vulnerable to mental distress than adults (see the first section of this chapter).[151] Taken together, these factors can perpetuate inequalities, not only between neighbourhoods but also between cities, countries and regions, as levels of violence vary across different areas.

Collective violence can increase inequalities between groups of people

In some areas of the world, the root cause of neighbourhood violence is organized crime. People who reside in neighbourhoods where drug cartels or other criminal groups operate experience more mental distress, not least because of the perceived threat of violence. Evidence from Mexico shows that information about brutal acts, such as executions, and about violent confrontations between the local police and criminal groups has caused substantial mental distress for community members. On some occasions this information may be diffused purposely to instil fear in the community.[152] Mental distress caused

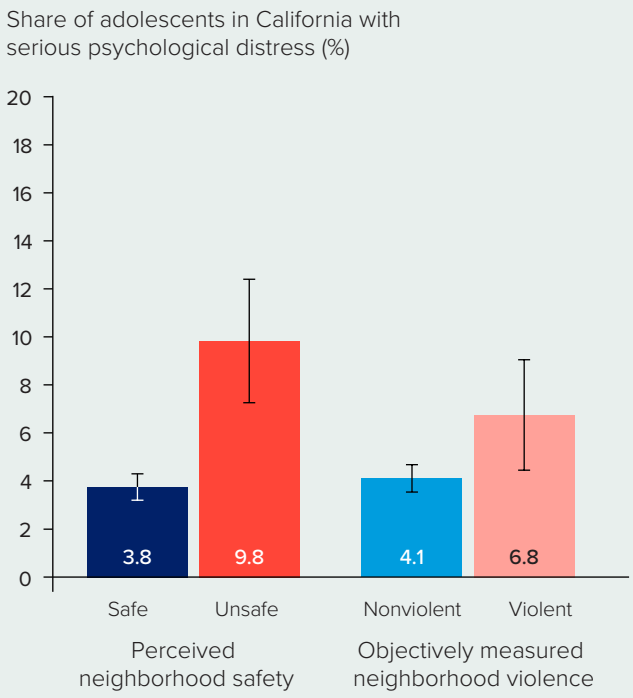
Box 2.3 Neighbourhood violence is bad, but uncertainty around it can make it even worse

Direct exposure to violence and the possibility of experiencing violence as a resident of a neighbourhood that is perceived as unsafe are significant risk factors for mental distress. Across Buenos Aires, Lima, Medellín, Mexico City and São Paulo exposure to interpersonal violence—for example, being beaten up, witnessing death or someone getting injured, being mugged or threatened with a weapon, and sexual violence—and the experience of living in neighbourhoods with a higher prevalence of violent crime (after individual violence exposure is accounted for) are associated with higher odds of anxiety and mood disorders.[1]

In Baltimore, Maryland, survey respondents living in violent crime hotspots report higher rates of depression (61 percent higher) and post-traumatic stress disorder (85 percent higher) than residents in coldspots.[2] Depression can be caused by indirect exposure or other factors related to living in violent neighbourhoods. In some cases the perceived level of violence in the neighbourhood and the uncertainty around being exposed to it can be at least as troubling.

Adolescents in California who perceive their neighbourhood as unsafe are twice as likely to experience serious mental distress as their peers who perceive their neighbourhood as safe. They are also more likely to suffer from distress than adolescents who live in neighbourhoods that are considered violent based on objective measures (box figure 1).[3]

Box figure 1 Perceived risk can induce more stress than actual risk



Note: Whiskers indicate the 95 percent confidence interval.
Source: Goldman-Mellor and others 2016.

Mental distress can also be exacerbated by an interplay of other factors. Several of these factors in a population-based survey of adults living in a group of *favelas* (slums) in Rio de Janeiro—specifically being younger, female or unemployed; having a lower income; and having experienced and fearing neighbourhood violence—were separately and significantly associated with poorer mental health outcomes. These factors, together with past experiences of violence and the fear of violence, were also significantly associated with higher levels of mental distress.[4]

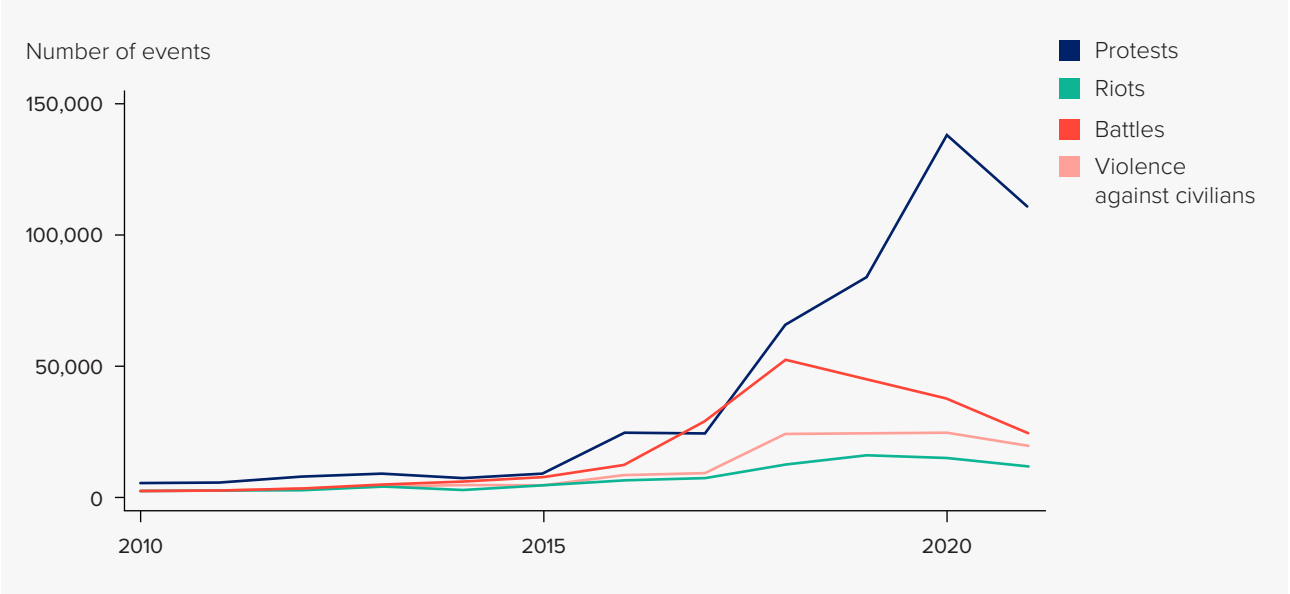
Notes
1. Benjet and others 2019. **2.** Weisburd and others 2018. **3.** Goldman-Mellor and others 2016. **4.** Cruz and others 2021.

by organized crime is not limited to victims and the community. Members of criminal groups also suffer from mental distress because of chronic exposure to violence, potentially increasing cycles of violence, as some types of mental distress can result in aggressive behaviour.[153]

Violence during protests, riots and clashes with the police can cause emotional imbalances, fears, worries and even psychological trauma. Over the past decade protests, sometimes accompanied by related political violence, increased substantially, until the Covid-19 pandemic hit (figure 2.7).[154] When political climates change and authorities do not fully respect the right to freedom of expression, people may sense repression and start feeling impotent or powerless.

Sometimes, frustration throughout the population can also turn into clashes between protesters and police, causing mental distress. A protester from India claims, "[I] freeze up, feel[ing] numb and uncertain anytime [I] see a policeman, or someone wielding a lathi, or when streetlights go off. … I see people break down in gatherings… friends

Figure 2.7 Increases in political violence have meant more uncertainty for many people



Note: *Protest* is defined as a public demonstration in which the participants do not engage in violence, though violence may be used against them. *Battle* is defined as a violent interaction between two politically organized armed groups at a particular time and location. Battles can occur between armed and organized state, nonstate and external groups and in any combination therein. *Riot* is defined as a violent event where demonstrators or mobs engage in disruptive acts, including but not limited to rock throwing, property destruction and the like. *Violence against civilians* is defined as violent events where an organized armed group deliberately inflicts violence upon unarmed noncombatants. The perpetrators of such acts include state forces and their affiliates, rebels, militias, and external or other forces (ACLED 2019).
Source: Human Development Report Office calculations using data from ACLED (2021).

getting full-blown panic attacks."[155] The effect can be as severe as the ones caused by armed conflict, in which WHO estimates the PTSD rate to be a little over 21 percent.[156] A study from Hong Kong Special Administrative Region, China, found a combined prevalence of depression and PTSD of 21.8 percent among the adult population during the 2019–2020 social unrest. There was also a strong association between heavy politics-related social media use and mental distress, attributable to emotion contagion.[157] Following violence in Syrian Arab Republic, civilians expressed panic attacks, especially towards the possibility of "disappearing" while being transferred in detainment.[158] The Syrian conflict also shows how collective violence, such as riots, battles or violence against civilians can escalate into armed conflicts and civil wars.[159]

When that happens, severe and long-lasting mental distress can be the consequence for large parts of the population, given the nature of traumatic experiences related to war settings. From the early 2000s until the outbreak of the war in Ukraine, there have been few interstate conflicts, but the past decade has witnessed a surge in battle-related deaths due to civil conflicts, some subject to foreign state interventions.[160] In postwar settings about one in five people suffer from mental health conditions.[161] PTSD is very common among war survivors, affecting about 354 million adult war survivors,[162] not least because of the direct threat to experiencing violence and the constant possibility of loss or injury of loved ones.[163] Grief and sadness have been related to addictive behaviour, particularly to increased substance abuse.[164] This may put an additional burden on public health systems, considering the long-term consequences of substance abuse for mental and physical health.

Globally comparative data on the prevalence of PTSD remains a challenge, but more specific examples from war torn countries can provide deeper insights into the number of affected people and into the mechanisms and causalities behind them. Due to recurrent wars and armed conflicts in Iraq, for example, the prevalence of PTSD among young people ages 17–19 is 25 percent,[165] and more than two-thirds of adult men suffer from anxiety and emotional instability.[166] In Nigeria the Boko Haram insurgency has contributed to major mental distress, including

severe emotional disorders, psychological distress, psychotic disorders, PTSD and depression.[167] The militia sexually assaults women and girls,[168] leading to social isolation, depression and suicidal ideation.[169] Military personnel stationed in Nigerian armed conflict zones also have a high probability of suffering from PTSD and avoidance symptoms.[170] But survivors are often not diagnosed with PTSD and do not identify their condition as such. There are other, culturally aligned explanations for what people feel and go through, and following those, people may seek alternative approaches to integrative health and mental wellbeing.[171]

About 450 million children—or one in six—currently live in conflict zones, with devastating consequences for their mental health,[172] including PTSD.[173] The PTSD prevalence rate was 44 percent among child survivors of the Rwandan genocide and 87 percent among children exposed to the bombings in Gaza.[174] In Nigeria Boko Haram has recruited young children to join its militia, causing severe mental distress associated with warfare.[175] Some of these effects can be long-lasting if not adequately treated: children who survived the Viet Nam war show increased symptoms of depression in adulthood.[176]

Apart from the threat to physical integrity, armed conflicts can expose people to displacement, destroy critical infrastructure, disrupt supply chains, hinder investment and thus undermine economic growth and development, possibly resulting in massive unemployment—all adding to mental distress of large parts of the population.[177] When armed conflict forces people to leave their homes, this complicates the overall situation even further. As of mid-2022 at least 100 million people are estimated to have been forcibly displaced from their homes worldwide due to conflict, with major displacements in Afghanistan, Burkina Faso, Democratic Republic of the Congo, Ethiopia, Myanmar, Nigeria and Ukraine.[178]

The war in Ukraine has caused a major increase in displaced people, with more than 7 million internally displaced persons and more than 5.6 million refugees.[179] Children, who account for about half of the displaced, become exposed to all sorts of mental distress.[180] Globally, there are now nearly 37 million displaced children—the highest number ever recorded.[181] When displaced, people may lose their material possessions, community affiliations and social support networks. And if they flee to another country, possibly even their civic duties, access to social services, professions, occupational identity and much else—all risk factors for mental distress that affect people's capabilities sets.[182] In such an environment where people suffer from impaired health, limited education opportunities and unemployment, mental distress is more likely to set in but less likely to be treated because resources are desperately needed on all ends. Indeed, countries experiencing conflict present the widest gap between people who need mental healthcare services and people who have access to them.[183] Community-level approaches are promising for facilitating access to mental healthcare services in these settings (box 2.4).

> "Some groups of people have been excluded, disrespected and discriminated against for centuries, with devastating effects on their mental wellbeing and human development at large

Because some groups of people are affected more by violence than others, and thus suffer more from mental distress than others, the alteration of their conversion factors limits their freedom to achieve and thus increases inequality of opportunity across neighbourhoods, districts and even countries, depending on the level of violence people are experiencing (and on access to mental healthcare services and other resources that can mitigate distress). Moreover, the exposure to violence can itself create vicious cycles of even more violence if left unattended.

Discrimination unsettles minds by attacking human dignity

Some groups of people—including women; certain ethnic groups; people of colour; people who identify as lesbian, gay, bisexual, transgender, queer, intersex or other sexual minority (LGBTQI+); and people with disabilities—have been excluded, disrespected and discriminated against for centuries, with devastating effects on their mental wellbeing and human development at large. At the institutional level discriminatory norms and laws of some countries still bias the criminal justice system and block access to high-quality education and health services, economic

Box 2.4 Tackling mental distress at the community level

The rationale behind community-based mental health services is that they tend to have greater acceptability among the population—and better accessibility and affordability than most other healthcare options. They typically enable family involvement, are less prone to stigma and discrimination, promote mental health awareness and have enhanced clinical effectiveness given the involvement of trusted local providers.[1] One example is the Mental Health Innovation Network's Basic Needs Mental Health and Development Model, which has reached more than 650,000 people and their family members in different low- and middle-income countries. It has increased access to treatment among service users by 84 percent, and users have reported a 75 percent reduction in symptoms—all while costing only $9.67 a month per person.[2] In some countries, including Rwanda, South Sudan and Mexico, tackling mental distress at the community level has become an important part of the public health strategy.

Rwanda

The 1994 genocide in Rwanda has had numerous long-lasting adverse effects on mental health among citizens, including high rates of depression and post-traumatic stress disorder (PTSD).[3] Like other countries, Rwanda has made efforts to address the population's mental distress. In seeking to ensure the availability of mental health services at the community level by 2024,[4] the government has used several strategies, such as establishing mental health facilities in all community units and health centres, enhancing the quality of mental healthcare by constructing a National Mental Health Care Center, and improving reporting and surveillance systems to manage and conduct patient follow-ups.[5] Over time the government has decentralized mental healthcare and maintained at least one psychologist and psychiatric nurse per hospital.[6] Such interventions help the people who suffer from mental disorders to heal, to establish strong social networks at the community level and to become emotionally more resilient.[7]

South Sudan

South Sudan's people also struggle with mental distress, such as depression, anxiety and PTSD caused by conflict, violence, economic hardship and poor access to healthcare, among others.[8] To help people suffering from mental distress, including those who have experienced armed conflict and violence, the International Committee of the Red Cross's mental health teams provide counselling services in South Sudanese health facilities such as primary healthcare centres, physical rehabilitation centres and surgical wards.[9] This approach is similar to the Rwandan one in that it tries to leverage local public health infrastructure and trusted networks to spread access to mental healthcare.

Mexico

Mexico's mental health policy involves increasing public mental health awareness, community care and outpatient services as well as keeping the need for hospitalization to a minimum, among others.[10] Specifically, to address mental disorders, Mexico uses the community mental healthcare model, which involves developing outpatient clinics, rehabilitation centres and sheltered homes,[11] to ensure access to mental health services even in remote areas.[12]

Notes

1. Kohrt and others 2018. **2.** MHIN 2022. **3.** Rwanda Ministry of Health 2018. **4.** Rwanda Ministry of Heatlh 2018. **5.** Rwanda Ministry of Health 2018. **6.** Smith and others 2017. **7.** Hynie and others 2015. **8.** ICRC 2020. **9.** ICRC 2020. **10.** Block and others 2020. **11.** Alvarado and others 2012. **12.** Block and others 2020.

opportunities and wealth accumulation, attacking human dignity and increasing inequalities.[184]

Since many measures of development capture outcomes at the aggregate level, horizontal inequalities often remain unrevealed, resulting in policies that fail to address structural discrimination. But people also suffer from discrimination in their daily lives, when attacked or excluded by peers, colleagues or neighbours or on the streets. Both types of discrimination can cause mental distress and interact with inequalities, mutually reinforcing each other and creating intergenerational cycles of inequality and discrimination.

Structural discrimination reinforces inequalities

Structural discrimination and racism have been found to increase overall health disparities through several channels,[185] including mental distress, environmental adversities and unequal healthcare.[186] Discrimination can be seen as a latent form of violence,

constituting a psychological stressor that has been empirically related to depression; anxiety; delinquent behaviour; alcohol, tobacco and drug use as coping mechanisms; metabolic disease; cardiovascular disease; low birth weight; and prematurity.[187] Structural or systemic discrimination can sometimes turn into actual violence, going hand in hand with human rights violations. The most extreme case is genocide, but other forms of human rights violations and disrespect of human dignity have left entire minority groups, such as the Rohingya or Yazidi populations, with serious mental health problems as well.[188] Exclusion and discrimination can impair certain groups' mental wellbeing, as with migrants who struggle in adapting to the host country, specifically with cultural congruity, identity and even bereavement.[189] Culturally aligned healing approaches are especially important here, because different people believe in different things, which may alter the effectiveness of some mental health interventions.

In the case of racism, the effect on mental wellbeing can be intergenerational: vicarious racism —that is racism experienced by parents and then transmitted to children—can affect children's mental, physical and socioemotional health (some examples include increased body mass index, depression, anxiety, substance use, delays in cognitive development and increased healthcare use for sick visits).[190] This effect runs mainly through children's increased threat perception, harsher parenting practices, more complicated parent–child relationships and racial socialization—that is the information children receive about race and racism.[191] Younger children are at higher risk of developing long-term defensive patterns when indirectly exposed to racism (see above about the effects of threat on long-term behavioural consequences). Children who are affected by discrimination and have insufficient psychological resilience or resources to build it may become even more disadvantaged with respect to their peers.

Interpersonal discrimination harms societies

Structural discrimination involving institutions, rules, and norms is not the only attack on people's dignity. Discrimination and exclusion among peers, colleagues or neighbours or on the streets may also leave psychological scars that last a lifetime if untreated. Apart from race and ethnicity people are sometimes discriminated against due to their sexual orientation or gender identity. In some countries LGBTQI+ people have 4.5 percent stronger symptoms of depression and a 40 percent higher social interaction anxiety rate than their non-LGBTQI+ counterparts.[192] When minority statuses overlap—for example, when an LGBTQI+ person identifies as ethnic minority—the effects of discrimination may multiply, making the person more vulnerable than individuals with a single minority status.[193] LGBTQI+ young people appear to be especially vulnerable to discrimination—important, given their delicate stage of development and identity formation. Some national surveys on this minority group have found that:

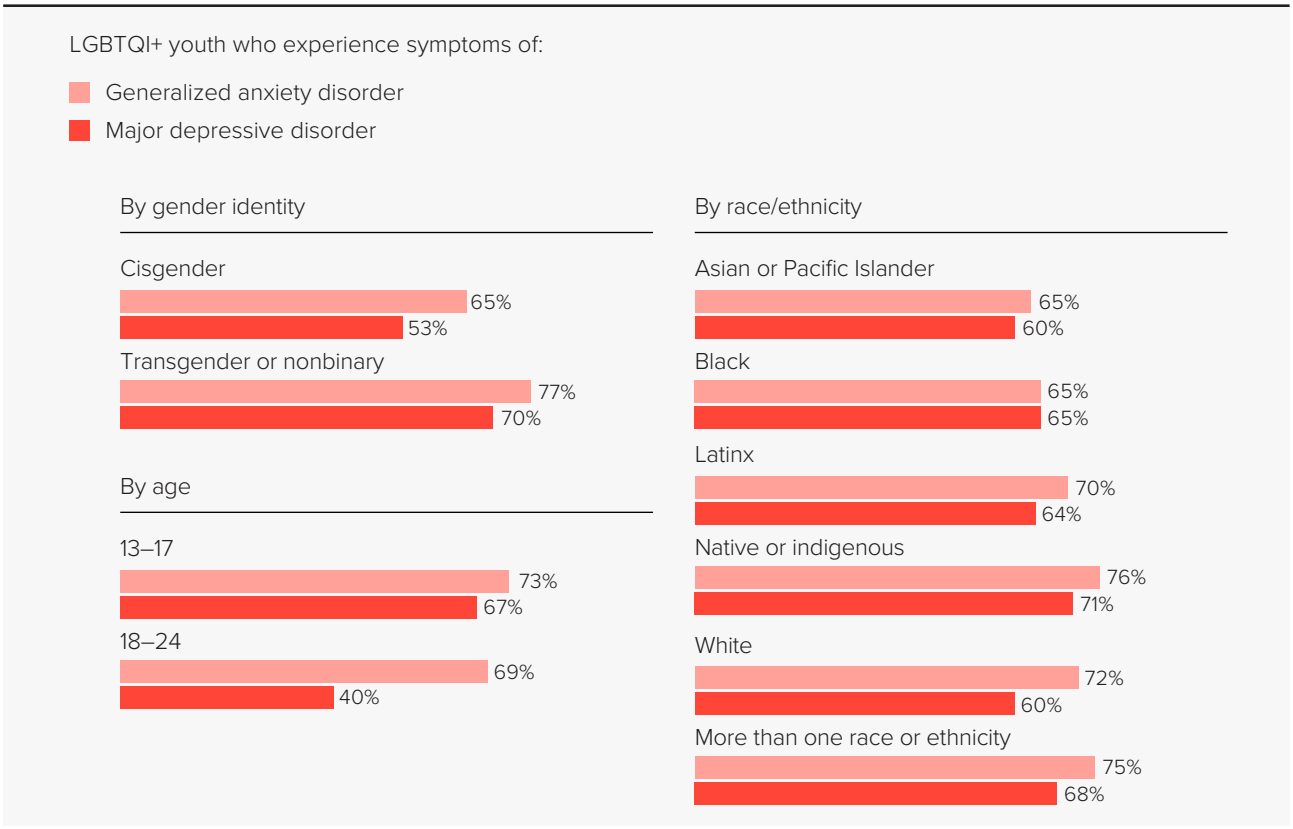
- More than 75 percent of LGBTQI+ young people report having experienced discrimination based on their sexual orientation or gender identity.
- More than half of transgender and nonbinary young people have seriously considered suicide within the past year, 71 percent experienced symptoms of anxiety disorder and roughly 62 percent have had major depressive disorder.[194]
- Almost all survey participants (95 percent) report difficulty sleeping at night, and 70 percent had felt worthless or hopeless during the past week.
- Only 26 percent of participants feel safe at school.[195]

The two major mental disorders are also more common among LGBTQI+ young people, though there is no significant variance between different ethnic identities (figure 2.8).[196]

> "Mental distress caused by exclusion, disrespect and discrimination is one more factor that can increase multidimensional inequalities within societies

Mental distress caused by exclusion, disrespect and discrimination is one more factor that can increase multidimensional inequalities within societies. Where discrimination does not directly increase health disparities, the mechanism runs through mental distress, which ultimately impairs physical health, hindering people from developing their full potential and living lives they have reason to value. These disadvantaged people then have different conversion factors from their peers—and thus different capability sets (freedom to achieve)—which further increases

Figure 2.8 High levels of mental distress among young people who identify as lesbian, gay, bisexual, transgender, queer, intersex or other sexual minority (LGBTQI+)



Source: The Trevor Project 2021.

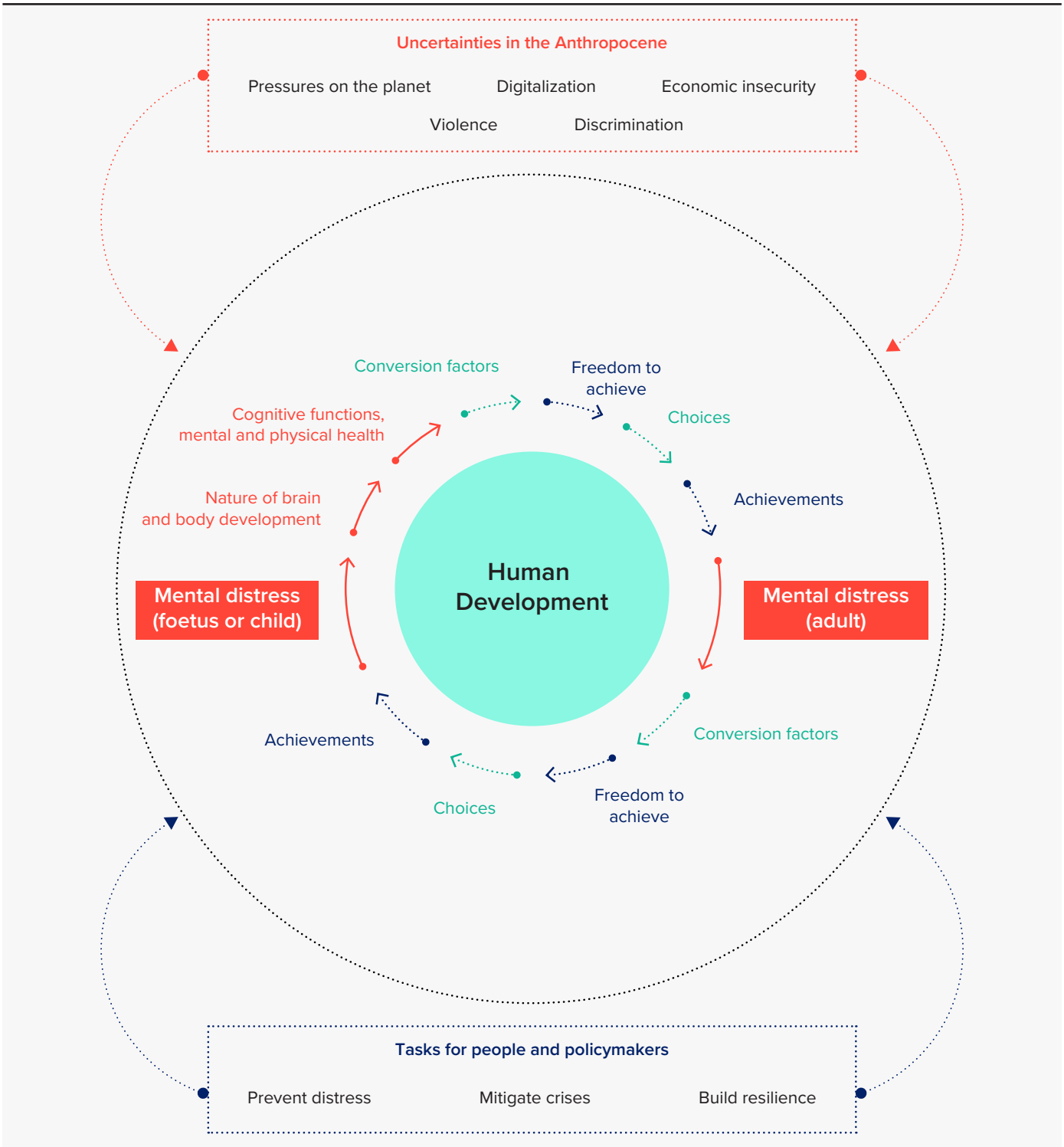
multidimensional inequalities. In some cases this will further exacerbate discrimination, exclusion and disrespect because victims are often blamed for their disadvantaged condition in meritocratic societies.[197] It is up to us to stand up against discrimination, protect each other mutually in socially cohesive societies and exercise agency when it comes to resilience building.

Human development in uncertain times

This chapter shows how mental stressors do not act in a vacuum; they are interconnected and may reinforce each other,[198] particularly in the context of uncertainty described in chapter 1. At the same time multiple systemic factors can help build resilience,[199] as explored in part II of the Report. Different sources of toxic stress affect not only people's mental wellbeing but also their physical health, especially at an early stage of the lifecycle, given that body and brain are still developing. Child, youth and even foetal development are functions of socioeconomic, political and social structures, among many others, all of which determine the level of adversities and distress people are exposed to. So, individual conversion factors—meaning each individual's ability to convert resources into capabilities (freedom to achieve) and later into functionings (achievements)—will vary between people and throughout the lifecycle. The intergenerational effect of this mechanism is remarkable due to the strong impact of toxic stress and adversities during pregnancy and early childhood. Mental distress can also affect the capability set of adults, as several examples throughout the chapter show. In both cases the expansion of capabilities will be hindered, restraining people's choices to live lives they have reason to value. Mental distress can thus shape individuals' levels of human development as well as the aggregate level of human development of countries and regions, with consequences for inequality within and between countries and regions (figure 2.9).

This chapter shows the implications of uncertain times—from economic insecurity to anthropogenic

Figure 2.9 Human development amid multidimensional uncertainties



Source: Human Development Report Office.

pressures, digitalization, violence, discrimination and exclusion—for mental distress and how mental distress can in turn constrain human development for some people in some places, potentially increasing inequalities. Tasks for people and policymakers to prevent mental distress, mitigate crises and build psychological resilience are noted in figure 2.9 and are elaborated in part II of the Report.

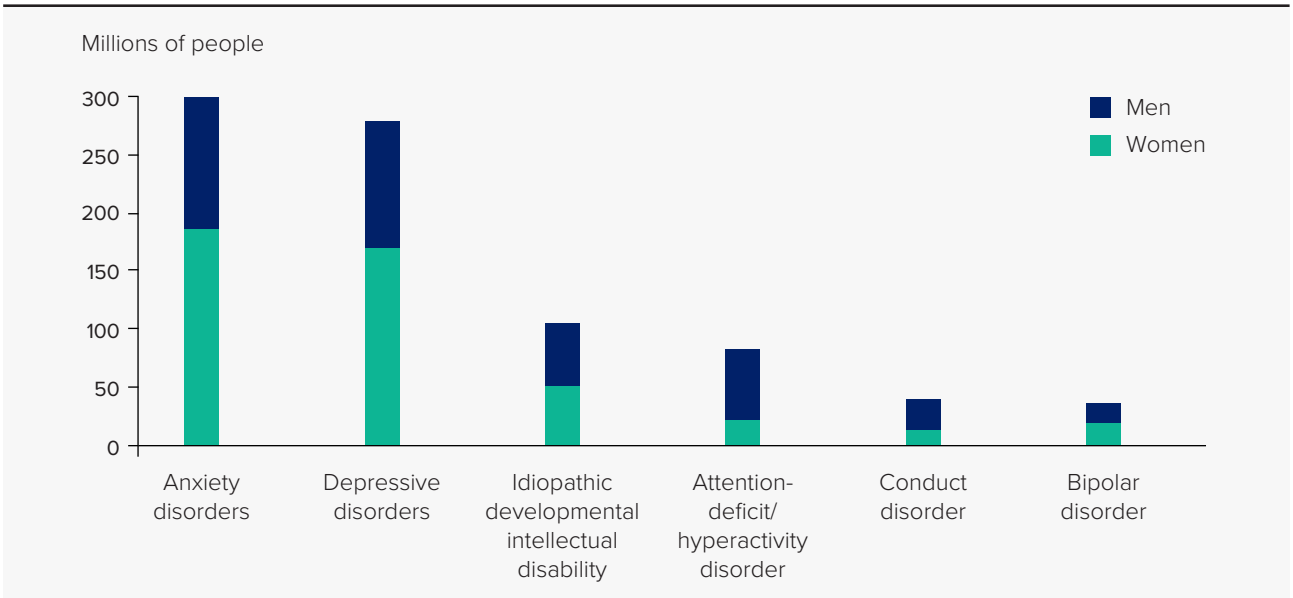
Measuring mental wellbeing—an ongoing effort

Measuring mental wellbeing is challenging because the concept is much wider than the mere absence of mental disorders.[1] Not all people who suffer from mental distress develop mental disorders, and many people do not seek professional help due to stigma or a lack of access to mental health services (including for lack of insurance coverage). They may thus not identify their condition as a mental disorder.[2] Hence, numbers that count these disorders are underestimated. Moreover, mental wellbeing is neither binary nor constant throughout the lifecycle. It is a complex continuum that can comprise all sorts of stages, from ideal wellbeing to severe emotional pain, disorientation and suffering.[3]

Not enough is done to enhance mental wellbeing and provide help for people who go through phases of mental distress. On average, countries spend less than 2 percent of their healthcare budget on mental health.[4] Due to a lack of resources, inaccurate assessments and shortage of trained medical staff and healthcare providers, only about 10 percent of people worldwide who need mental health interventions receive them.[5]

Even with partial and incomplete information on the extent of mental disorders, the evidence shows that they place a massive burden on every aspect of human livelihoods—on relationships, education, work and community participation.[6] Before the Covid-19 pandemic one person in eight worldwide, or 970 million people, suffered from a mental health disorder, more women than men.[7] And more than 700,000 people die by suicide each year,

Figure S2.1.1 Global prevalence of selected mental disorders, 2019



Note: Anxiety disorders incorporate disability caused by experiences of intense fear and distress in combination with other physiological symptoms. Depressive disorders include disability from major depressive disorder and dysthymia; major depressive disorder involves the experience of depressed mood or loss of interest or pleasure almost all day, every day, for two weeks, and dysthymia symptoms are less severe but chronic. Idiopathic developmental intellectual disability captures the health loss resulting from intellectual disability that arises from any unknown source. Attention-deficit/hyperactivity disorder is an externalizing disorder, incorporating disability from persistent inattention and/or hyperactivity/impulsivity. Conduct disorder occurs in those under age 18 and incorporates disability from antisocial behaviour that violates basic rights of others or major age-appropriate societal norms. Bipolar disorder is a mood disorder incorporating disability from manic, hypomanic or major depressive episodes (IHME 2021).
Source: Human Development Report Office calculations using data from IHME (2021).

predominantly in low- and middle-income countries, accounting for 1 in 100 deaths globally (the second leading cause of death among those ages 15–29). But for every death by suicide there are at least 20 more attempts, an expression of severe human suffering.[8] Although more men than women die by suicide, more women attempt suicide.[9]

Mental health problems are also the single leading cause of disability worldwide.[10] Children, adolescents and older people are most affected. WHO estimates that, globally, approximately 20 percent of children and adolescents[11] and about 15 percent of people age 60 and older suffer from mental disorders.[12] The most common mental disorders are anxiety (affecting 300 million people worldwide) and depression (affecting 280 million people; figure S2.1.1).[13] Most of these people live with their condition without ever receiving treatment.[14] Much more work is needed to statistically embrace the concept of mental wellbeing, develop adequate measurements for it and offer universal services to enhance it.

The cause of diagnosed mental disorders varies with context and evolves over time, interacting with several factors, from genes to the environment. Only about 26 percent of the variation in anxiety[15] and 37 percent of the variation in depression is due to variation in genes (heritability).[16] For other mental disorders the proportion can be higher.[17] This chapter focuses on the effects of distress on mental wellbeing for which nonheritable factors are most relevant.

NOTES

1 While the literature still lacks of a clear definition of mental wellbeing, the World Health Organization (WHO) defines mental health as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO 2022b).

2 WHO 2022c.

3 UNICEF 2021c; WHO 2022c.

4 WHO 2022c.

5 PAHO 2019; WHO 2021c.

6 WHO 2021e, 2022b.

7 WHO 2022c.

8 WHO 2021d, 2021f.

9 WHO 2022c.

10 PAHO 2019.

11 WHO 2021f.

12 WHO 2017.

13 IHME 2021.

14 WHO 2022c.

15 Purves and others 2020.

16 Lee and others 2013.

17 Lee and others 2013.

SPOTLIGHT 2.2

Post-traumatic stress disorder—not just from combat

Post-traumatic stress disorder (PTSD) has become known mostly as a psychological condition common among war veterans who have returned from combat and been severely traumatized by their experiences on the battlefield. Less known is that PTSD is common among the general population, caused by child abuse, domestic violence, life-threatening accidents, political violence, human rights violations and disasters associated with natural hazards.

Trauma is "a direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate."[1]

A wide range of symptoms can develop (table S2.2.1). As every human being and each traumatic event differs, strength, duration and types of symptoms vary among survivors. Initially, traumatic experiences trigger the "fight or flight" response in

Table S2.2.1 Symptoms of post-traumatic stress disorder among adults and children

Symptoms among adults	Symptoms among children
→ Avoidance of thoughts, feelings or conversations associated with the event as well as of people, places or activities that may trigger recollections of the event → Trauma-related thoughts or feelings (such as fear, horror, anger, guilt or shame) → Intrusion: Recurrent, involuntary and intrusive recollections → Dissociative reactions → Inability to remember an important aspect of the event (not due to head injury, alcohol or drugs)—usually caused by dissociative amnesia → Persistent and exaggerated negative beliefs → Persistent inability to experience positive emotions → Diminished interest or participation in activities → All summarized as depression → Persistent, distorted cognitions about the cause or consequences of the event and possible blame on self or others → Feelings of detachment or estrangement from others → Irritable or aggressive behaviour and angry outbursts → Reckless or self-destructive behaviour → Hypervigilance → Exaggerated startle response → Concentration problems → Sleep disturbance (traumatic nightmares)	→ Affect dysregulation → Aggression against self and others → Unmodulated aggression and impulse control → Dissociative symptoms (numbing, splitting, fragmentation) → Depression → Separation anxiety disorder → Oppositional defiant disorder → Phobic disorders → Disturbed attachment patterns → Rapid behavioural regressions and shifts in emotional states → Loss of autonomous strivings → Failure to achieve developmental competencies → Altered schemas of the world → Anticipatory behaviour and traumatic expectations → Chronic feelings of ineffectiveness → Impaired memory → Diminished concentration → Visceral dysregulation and muscular contraction → Anxiety → Somatization (for example, gastrointestinal distress, migraines, chronic back conditions) → Attentional and dissociative problems → Difficulty negotiating relationships with caregivers, peers and, subsequently, intimate partners → Chronic inflammation → Type 2 diabetes → Obesity → Especially with sexual assault: • Substance abuse • Borderline and antisocial personality • Eating, dissociative, affective, somatoform, cardiovascular, metabolic, immunological and sexual disorders • The loss of bodily regulation in the areas of sleep, food and self-care • The apparent lack of awareness of danger and resulting self-endangering behaviours • Self-hatred and self-blame

Source: Lengfelder (2021) based on American Psychiatric Association (2013), Center on the Developing Child (2013), Danese and Lewis (2017), Danese and others (2014), Hackett and Steptoe (2017), Heller and LaPierre (2012) and Van der Kolk and others (2005).

the body. When this biological response is not processed, as through rapid eye movement sleep or therapy, it remains activated in later life, when it is no longer necessary or useful. Trauma survivors then remain hypervigilant, with startling responses long after the traumatic event.[2] They may also develop depression—persistent and exaggerated negative beliefs about themselves, others and the world, combined with an inability to experience positive feelings and a loss of interest in activities important before the trauma. Depressed individuals may feel detached or estranged from others with an increasing feeling of isolation, exacerbating the negative worldview.[3]

Some individuals tend to avoid thoughts or emotions related to the traumatic event, whereas others experience especially strong emotions or thoughts related to the trauma. The disproportional significance of the trauma can impede focus on other aspects of life. Some thoughts can be intrusive, leading to involuntary recollections of memory that had been lost due to fragmentation or (partial) amnesia.[4] Other consequences may include concentration problems, sleep disturbances,[5] or aggressive, reckless or self-destructive behaviour.[6]

Early childhood trauma is a special case in which the impact on daily life goes beyond the symptoms of regular PTSD.[7] Even after children are removed from the traumatizing setting, problems with self-regulation, emotional adaptability, relating to others and self-understanding may continue throughout life.[8] And post-traumatic stress in early childhood is associated with obesity, chronic inflammation and type 2 diabetes.[9] Chronic dissociation and partial amnesia are two common symptoms of early childhood trauma that can affect brain functioning and development with long-lasting consequences.[10] Chronic dissociation detaches real-life situations from emotions, suppressing natural responses (such as crying when something sad happens), which are important for mental wellbeing. Difficulty with recalling memories from one's childhood may lead to distorted identity formation when it is unclear what happened where, when or why during certain stages of one's life, and it may cause self-doubt when feeling unable to rely on one's own mind and memory.

NOTES

1 American Psychiatric Association 2013.

2 Herman 1992; Levine 2008, 2010; Levine and Frederick 1997; Van der Kolk 2015; Van der Kolk and others 2005.

3 American Psychiatric Association 2013.

4 Van der Kolk and Fisler 1995.

5 Herman 1992.

6 American Psychiatric Association 2013.

7 Some of the symptoms of adult and childhood trauma overlap, but they are usually stronger in early childhood trauma (Heller and LaPierre 2012).

8 Center on the Developing Child 2013; McEwen and McEwen 2017.

9 Danese and Lewis 2017; Danese and others 2014; Hackett and Steptoe 2017.

10 Heller and LaPierre 2012.